1: Pelzer S-5 (1940-1941) 1945 AL1 Southeast Asia AL1

with sugar or tobacco grown under plantation management. But is the high fertility of the soil due to this crop rotation, or is it rather the result of the heavy application of commerical fertilizer and the thorough cultivation of the soil under Western management?

In no country of Southeastern Asia is there so great a variety or so intensive a use of commercial fertilizers as in Japan.[17] In general, the peasants of Southeastern Asia lack money for commercial fertilizers. In Indochina local phosphates are within reach of some of the Annamese, but the costs of imported fertilizers are prohibitive. In Java, although attempts to make possible the use of fertilizers through the agency of public credit institutions were successful in some special instances, not more than one per cent of the cultivated area received any commercial fertilizer in 1939. On the other hand, estimates indicate that more than 1,000,000 hectares of sawah have a phosphate deficiency and that a moderate application of phosphate would augment the yield by 25 to 50 per cent.[18]

The Agricultural Advisory Service was able to raise the productivity of wet-rice fields in West Java by about 10 per cent. It encouraged the peasants to use fertilizer on seedbeds, to sow rice more thinly on the beds (thus producing stronger seedlings), and to plant the seedlings in rows so that weeding could be done with a special instrument, the *landak* (Fig. 59).* This weeder was developed in Japan. During the years immediately preceding 1939, these improvements in West Java resulted in an increase in output of unhusked rice amounting to 300,000 quintals, or 30,000 metric tons, with a value of nearly 1,000,000 guilders. This shows that some improvements in cultivation may increase production without a great capital outlay.[19]

Java may be compared only with southern China and with Japan in the cleanness of its rice fields. The Filipino does not pay much attention to weeding. The Malayan, Thai, Cambodian, Cochinchinese, and Filipino rice farmers have more flooded riceland per capita at their disposal than the people of Java and can thus afford to cultivate their land less intensively.

Irrigation Problems

Peasant irrigation works usually take care of the fields of only one village or of a small group of people who have joined together for the specific purpose of building and maintaining an irrigation system. These works consequently are small and usually inadequate, but nevertheless they de-

[17] "The chief commercial fertilizers used in Japan are pressed herrings, pressed sardines, dried sardines, other fish cakes, bone meal, soybean cake, rapeseed cake, cottonseed cake, other vegetable-oil cakes, ammonium sulphate, calcium cyanamide, calcium phosphate, and potassium phosphate. Calcium phosphate and ammonium sulphate are probably the most representative chemical fertilizers."—Wickizer and Bennett: The Rice Economy, 1941, p. 252, footnote 33.

[18] Departement van Economische Zaken: Voedselproblemen, 1940, p. 28.

[19] *Ibid.*, pp. 27–28.

* [See p. 117, category 116. -- Analyst]

10: Thompson S-4 (no date)1947 ALl Southeast Asia ALl

CHAPTER I · INTRODUCTION

I

LABOR SUPPLY IN SOUTHEAST ASIA

464 467 TWO MAJOR LABOR PROBLEMS, which have confronted Southeast Asia in the past and which remain unsolved, are the inadequacy and irregularity of labor supply and the dearth of organized labor movements having objectives like those of Occidental labor unions.

464 Except in such overpopulated areas as Java, the Tonkin delta, and Northern Annam, labor is generally inadequate in quantity and in quality to meet the requirements of large-scale enterprise. Where numerically adequate, the labor supply is either poorly distributed in relation to areas of employment or fails to respond to opportunities offered. The industrial development of the entire area suffers from lack of full-time services of skilled laborers. Some of the factory employees form the only stable, trained groups of workers. They comprise a small proportion of the population.

[874 461] Few facilities have existed for the training of skilled workers, and the association in Oriental minds of manual labor with the humblest social classes has limited wage-labor largely to those driven by economic necessity. Handicrafts are carried on principally by agriculturists in their leisure time and by other "non-professionals." Farmers form the bulk of the workers. Only during the slack agricultural season or after a disastrous harvest are they willing to perform labor for others.

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464 167 Supplementation of the inadequate labor force has been effected in various ways—some spontaneous, others planned. The starvation conditions chronic in south China and in India have caused emigration of workers to the underpopulated but richer regions of Southeast Asia, whence they usually repatriate their savings and eventually their persons to the home country. With the exception of Burma, which by reason of its geographic and administrative relations with India formed a special category, the prosperity which prevailed at times in Southeast Asia was less a factor in stimulating this flow than were conditions in the homeland.

Accelerated by the boom in plantation industries during the early